



# “CHANDRACHAKRA INCISION FOLLOWED BY KSHARASUTRA PROCEDURE IN BHAGANDARA (FISTULA IN ANO): A SINGLE CASE STUDY”

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## ABSTRACT:

*Bhagandara* is enumerated as one among the *Ashtamahagada*. The disease which involves *Bhaga*, *Guda* and *Basti pradesha*. It is a *Chedana sadya vyadhi*. *Bhagandara* is a chronic illness which can be co-related to *Fistula-in-Ano*. Communicating tract lined by unhealthy granulation tissue, opens internally in anal canal or rectum and perianal region. Many treatment modalities have been explained for treatment of fistula in ano, *Ksharasutra* application is one of them. It is a minimally invasive parasurgical procedure and induces both mechanical & chemical cutting and healing of fistulous tract. A 33 years old male patient came to Shalya tantra OPD, JSS Ayurvedic Medical College & Hospital on 1/07/2024 presented with complaints of swelling and pain in the left ischio-rectal fossa since 8 days. He has been diagnosed with a case of fistula in ano. The patient was treated with partial fistulectomy (*Chandrachakra* incision followed by *Chedana*) and *Ksharasutra* procedure. The patient recovered well with complete excision of tract.

**KEY WORDS:** *Bhagandara*, *Chandrachakra* incision, *Fistula in ano*, *Ksharasutra*

## INTRODUCTION:

*Bhagandara* is a chronic illness which can be co-related to Fistula-in-Ano, though it is not fatal but quite discomforting and troublesome to the patient, imposes a psychological stress on the patient.<sup>1</sup> The incidence of Fistula-in-Ano developing from an anal abscess ranges from 26% to 38%, the prevalence rate of Fistula-in-Ano is 8.6 cases per 100,000 population worldwide. In the men the prevalence is 12.3 cases per 100,00 population and in women it is 5.6 cases per 100,000 population.<sup>2</sup>

Fistula in Ano is an abnormal communication between 2 epithelial lined surfaces i.e., anal canal, rectum, perianal skin having non healing unhealthy granulation tissue. During the last century, numerous surgical procedures like Fistulectomy, Fistulotomy, Advancement Flaps, Fistula Clip Closure, LIFT technique, VAAFT procedure, Anal Fistula Plug Repair, Fibrin Glue and Seton Techniques have been developed, each of these carries significant risk of pain, delayed wound healing, incontinence and re-occurrence.<sup>3</sup>

The most scientific description about *Bhagandara* is given in *Sushruta Samhita*. According to *Acharya Sushruta*, *Bhagandara* is of 5 types and *Acharya Vagbhata* has mentioned 8 types, it is a *Chedana sadya vyadhi*. *Bhagandara* caused by vitiated *Vata* has symptoms like *Aruna varna Pidaka* with one or more openings, exudates large amount of clear frothy fluid, gives pain like *Tadana*, *Bhedana*, *Chedana*, *Suchivat*. *Bhagandara* with vitiated *kapha* has symptoms like itching pustule in locality, exudates large amount of slimy fluid. Hence clinically *Bhagandara* can be correlated to Fistula-in- Ano.

The prime aim of the treatment is to eradicate the tract and drain all collections from the site of infection while preserving anal continence and minimize the re-occurrence. *Acharya Sushruta* has mentioned basic 3 types of incisions namely *Tiryak*, *Chandramandala*, *Ardhachakra* according to site.<sup>4</sup>

In classics different varieties of incision have been explained by *Acharya Sushruta*<sup>5</sup> and *Acharya Vagbhata* for *Bhagandara*.<sup>6</sup> It is a *Chedana sadya vyadhi*.<sup>7</sup> In the management of *Parisravi Bhagandara* *Acharyas* have described *Chedana karma* for interconnected Low Anal Fistula with different types of incisions namely, *Kharjura patraka* (v-shape), *Ardhachandra* (semi-lunar), *Chandrachakra* (circular), *Suchimukha* (cone shape), *Awangamukha* incision.<sup>8</sup> *Chedana* is the main line of treatment in *Bhagandara*. The current Ayurvedic surgical approach for *Bhagandara* includes *Ksharasutra*, Partial Fistulectomy and IFTAK (Interception of Fistulous tract with application of *Ksharasutra*).

## CASE DESCRIPTION:

### HISTORY:

A 33 years old male patient visited Shalya tantra OPD, JSS Ayurvedic Medical College & Hospital, Mysuru, Karnataka presented with complaints of swelling and pain in the perianal region (left side) since 1 week. Patient is not a known case of Diabetic mellitus and Hypertension or other comorbidities.

## LOCAL EXAMINATION:

On inspection swelling was present in left perianal region. On digital rectal examination, induration was present at left side of perianal region, tenderness was present. Sphincter tone was normal. Case was diagnosed as Ischiorectal abscess preoperatively.

## INVESTIGATIONS:

All hematological investigations, Chest Xray, USG scan of abdomen was done prior to surgery. All reports were within normal limit.

DIFFERENTIAL DIAGNOSIS: Perianal abscess, Ischiorectal abscess, *Bhagandara pidaka*, *Bhagandara*.

DIAGNOSIS: Ischiorectal abscess with Fistula in ano

## TREATMENT:

*Dashanga lepa* for left ischiorectal fossa for 2days. I&D of ischiorectal abscess, identification of fistula tract followed by *ksharasutra* application.

Materials: All the sterile instruments as follows – Gloves, Probe, Artery forceps, Allis forceps, Kidney tray, Galley cup, BP handle, Surgical blade, Sponge holding forceps, Sinus forceps, Gauze pieces, Pads, Disposable syringe, Tissue cutting Scissor, Betadine and Hydrogen peroxide, Surgical spirit, Lignocaine 2% gel.

## PREOPERATIVE PROCEDURE:

Informed and written consent was taken. Subject was kept NBM for 6 hours prior to surgery. Part preparation was done. Proctoglycerin enema was given. Injection TT 0.5 ml IM stat was given. Injection Lignocaine 2% test dose 0.1ml subcutaneous was given.

## OPERATIVE PROCEDURE:

Under all aseptic precautions Spinal Anesthesia was given, the part was painted with povidone-iodine solution and draped in lithotomy position. Cruciate incision was taken in unhealthy tissue and excised. Pus was drained, 2 nicks were given anterior and posteriorly. Probing was done towards anal canal, fistula tract was identified. ‘*Chandrachakra*’ incision (circular-shaped) was taken over the unhealthy tissue which is connecting fistula tract, excision of the fistula track was done followed by *Kshara sutra* procedure. Wound wash was given with betadine and hydrogen peroxide. Complete Hemostasis was achieved. Anal packing was done using *Jathyadi Taila*.

## POST OPERATIVE PROCEDURE:

Subject was shifted to post operative ward. Catheterization was done. Foot end elevation. Restricted head movement was advised. The vitals were monitored every 2<sup>nd</sup> hourly. Oral liquid was started after 4 - 6 hours of

surgery. Appropriate Antibiotics, Analgesics and Anti Inflammatory drugs were administered for 5 days. Tab *Gandhaka Rasayana* 2BD A/F. Tab *Triphala Guggulu* 2BD A/F. Tab *Anuloma* DS 1 HS A/F. Sitz bath with *Panchavalka kwatha* was advised. *Matra basti* with *jatyadi taila* 20ml was advised twice daily.

## OBSERVATIONS:

Weekly assessment was done for post operative pain, discharge, itching, induration, granulation tissue, length of fistulous tract.

Parameters	POD 1	POD 7	POD 14	POD 21	POD 28
<b>Tenderness</b>	+++	++	+	Absent	Absent
<b>Discharge</b>	Absent	Moderate pus	Mild pus	Absent	Absent
<b>Itching</b>	Absent	Absent	Absent	Absent	Absent
<b>Induration</b>	3cms	2cms	1cms	0.5cms	Absent
<b>Granulation tissue</b>	Healthy	Healthy	Healthy	Healthy	Healthy

Initial tract length was 5.5cms, every week *ksharasutra* thread was changed, it got cut through with help of *Ksharasutra* in 56 days. Wound present in posterior aspect got healed in 70 days. After cut through fistulous tract patient was followed up weekly for 15 days. No signs and symptoms of recurrence and incontinence were observed during follow up period.



Pic 1 - Before OT

Pic 2 - POD 7



Pic 3 - POD 21



Pic 4 - Healed fistulous tract



Pic 5 - Completely healed fistula and wounds.

## DISCUSSION:

*Bhagandara* is considered as one among *ashtamahagada*. After *Chedana karma*, complications like large wound size, prolonged period of wound healing, recurrence are seen. Hence to overcome these complications *Ksharasutra* therapy is most beneficial in present era. Preoperatively the case was diagnosed as ischiorectal abscess. While operating fistulous tract was identified and *ksharasutra* was applied. The condition which does *darana* of *bhaga guda basti pradesha* without external opening is considered as *bhagandara pidaka*, with opening is considered as *bhagandara*. Abscess (*Guda vidradhi*) if not treated in appropriate time leads to Fistula (*bhagandara*). Hence postoperatively the case was diagnosed as fistula in ano (*Bhagandara*).

*Chedana* is the main line of treatment in *Bhagandara*. Proper knowledge about the type of incision to be taken, plays an important role before performing any *Chedana karma*. If *Bhedana* (Incision) is proper then only one can perform *Chedana karma*, hence type of *Bhedana* need to be considered more important. In *Chandrachakra* (circular) type of incision the external opening has to be excised by creating a bigger track and allowing pus to drain completely to avoid the further recurrence. This results in early granulation tissue formation and healing.

The *Ksharasutra* is a medicated surgical thread used in anorectal diseases. The contents of *Ksharasutra* are *Apamarga kshara*, *Snuhi ksheera*, *Haridra churna*. *Apamarga kshara* has *chedana*, *bhedana*, *lekhana* properties, it cauterizes tissues and helps in debridement. *Snuhi ksheera* has *shodana* and *ropana guna*, it helps in reducing inflammation. *Haridra* has *shothahara* and *vraha ropana* properties. Hence *Ksharasutra* has both anti-inflammatory and anti-microbial properties. Its alkaline nature helps in cutting, healing and prevents further recurrence.

## CONCLUSION:

*Bhagandara* is a disease of *Guda pradesha* which is difficult to cure. The management of fistula in ano requires detailed knowledge of perianal anatomy, pathophysiology and surgical aspects. Different types of surgical, parasurgical and medical management for *bhagandara* have been mentioned in ancient times and present era. In spite of many modifications in surgical aspects fistula in ano still remains as a big challenge. In present era *Ksharasutra* procedure is considered as gold standard technique.

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